

* SWBAT find action / reaction pairs

Sep 6-2:31 PM

Welcome!!!

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* Pick up:

- slip of paper (for later)
- notebook (if you use one)

Opening Question:

In outer space, how do space vehicles change direction, speed up, or slow down?



<http://www.youtube.com/watch?v=P8sUVhR7xjE>

Clip of Wall-E

6 DAYS
LEFT IN
QUARTER

Centering...

SECA Physics
Wednesday 30 October 2013

Sep 7-7:04 AM

Demo: 2 carts

What do you think is going to happen?

HOLDER?
DEPENDS?

What did we observe?

BOTH MOVED NO MATTER
WHO PULLED

Two spring scales: PULLED & HELD SCALES
BOTH SHOWED FORCE

Sep 21-2:13 PM

1ST: OBJECTS AT REST TEND TO STAY AT REST
" " IN MOTION " " " IN MOTION

2ND: $F = m \cdot a$

Big Idea: NEWTON'S 3RD LAW

For every **action** force, there is an
equal and opposite **reaction** force!

I push on the wall. Does the
wall push back? YES

OR I'D FALL OVER

Nov 9-7:37 AM

Worksheet

- Forces shown as arrows
- start at the point of contact

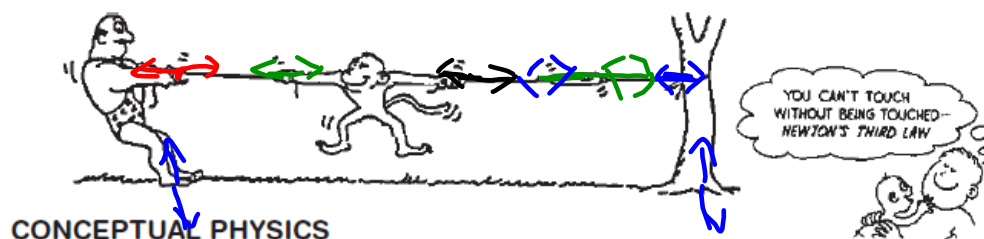
FOOT KICKS BALL



BALL HITS FOOT

SAME SIZE
 & OPPOSITE
 DIRECTION

2. Draw arrows to show the chain of at least six pairs of action-reaction forces below.



Sep 21-2:13 PM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. When one scale was held and the other scale pulled, which one showed a force on the scale?

A. pulled scale

B. held scale

C. they both showed a force

2. True or False: Newton's 3rd Law states, "For every **action** force, there is an equal and opposite **reaction** force."

3. What's the "reaction force" to "Head bumps ball"?

BALL BUMPS HEAD

Sep 14-7:28 AM